

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:	Date: September 12, 2007
Applicant : John W. SUSSMEIER et al.	Attorney Docket : F-802
Application No. : 10/803,636	Customer No. : 00919
Filed : March 18, 2004	Confirmation No. : 5369
Examiner : Prone, J.	Group Art Unit : 3724
Title : SYSTEM AND METHOD FOR PROVIDING SHEETS TO AN INSERTER SYSTEM USING A HIGH SPEED CUTTER AND RIGHT ANGLE TURN	

**Mail Stop Appeal Brief - Patents**

Commissioner for Patents  
P.O. Box 1450  
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Sir:

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

In support of the Notice of Appeal filed July 31, 2007, and pursuant to 37 C.F.R. § 41.37, Appellants present this brief. This brief is being timely submitted within two months of the filing date of the Notice of Appeal.

This is an appeal of the rejection of claims 1, 2, 4-9, 11, and 12 set forth in the final Office Action mailed May 1, 2007.

If any additional fees are required or if the payment provided is insufficient, Appellants request that the required fees be charged to Deposit Account No. 16-1885.

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I. **Real Party in Interest**

The real party in interest in this appeal is Pitney Bowes Inc., a Delaware corporation, the assignee of the entire right, title, and interest in this application.

**II. Related Appeals and Interferences**

There are no related appeals or interferences, of which Appellants, Appellants' legal representative, or Assignees are aware, that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

**III. Status of Claims**

Claims 1-12 are pending in this application. Claims 1, 2, 4-9, 11, and 12 are rejected. Claims 3 and 10 are objected to as being dependent upon a rejected claim, but indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Appellants hereby appeal the rejection of claims 1, 2, 4-9, 11, and 12.

The claims on appeal are set forth in the Claims Appendix in Section VIII.

**IV. Status of Amendments**

No amendments under 37 C.F.R. § 1.116 have been filed.

**V. Summary of Claimed Subject Matter**

The invention, as recited in claim 1, is directed to an inserter input system comprising a web feeder (See web feeder 10 in Fig. 1 and page 2, lines 15-17) providing a web of printed material (See web 100 in Fig. 2 and page 9, line 3), the web feeder feeding the web in a first direction; a web slitting device (See cutting device 11 in Fig. 2 and page 9, lines 5-12) splitting the web along the first direction into at least two portions; a transverse web cutter (See rotary cutter 21 in Fig. 2 and page 10, lines 1-8) cutting the portions of split web transverse to the first direction while the web is transported through the web cutter to form side-by-side individual sheets (See sheets 1 and 2 in Fig. 2), the individual sheets having a width in the transverse direction and a length in the first direction, the web cutter cutting sheets at a cutting rate; a right angle turn mechanism (See right angle turn device 30 in Fig. 2 and page 10, line 18 through page 11, line 6) downstream of the web cutter whereby the individual sheets are rearranged to be one on top of the other in a shingled arrangement, the right angle turn mechanism comprising a portion of a right angle turn transport (See right angle turn transport 37 in Fig. 2 and page 11, lines 17-23) transporting individual sheets at a first velocity, the first velocity being a function of the cutting rate multiplied by the width of the individual sheets (See page 18, line 1 through page 19, line 6); and a high speed separation transport (See high speed separation nip 34 in Figs. 2 and 3 and page 12, lines 14-19) downstream of the right angle turn transport and pulling individual shingled sheets out from the shingled arrangement and whereby sheets are thereafter transported serially and separated by a predetermined gap.

The invention, as recited in claim 8, is directed to a method for generating sheets from a continuous web for creating mail pieces, the method comprising feeding the continuous web in a first direction (See page 9, lines 3-5); splitting the continuous web along the first direction into at least two portions (See page 9, lines 5-12), the at least two portions each having a document width; cutting the portions of split web transverse to the first direction (See page 10, lines 1-8) at a cutting rate to form side-by-side individual sheets (See sheets 1 and 2 in Fig. 2), the individual sheets each having a document length; transporting the individual sheets at a first velocity (See page 11, lines 17-23) and turning the side-by-side sheets at a right angle whereby the individual sheets are rearranged to be one on top of the other in a shingled arrangement (See page 10, line 18 through page 11, line 6), the first velocity being a function of the cutting rate multiplied by the document width (See page 18, line 1 through page 19, line 6); and pulling individual shingled sheets out from the shingled arrangement at a second velocity whereby sheets are thereafter transported serially and separated by a predetermined gap (See page 12, lines 14-19).



**VI. Grounds of Rejection to be Reviewed on Appeal**

Claims 1, 2, 4-9, 11, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,443,447 to Ifkovits et al. ("Ifkovits") in view of U.S. Patent No. 5,439,208 to Moser et al. ("Moser").

**VII. Argument**

**Claims 1, 2, 4-9, 11, and 12 are patentable over Ifkovits in view of Moser**

A. Ifkovits and Moser Fail to Teach or Suggest All the Limitations of Claims 1 and 8

According to M.P.E.P. § 2143.03 (citing In re Royka, 180 USPQ 580 (CCPA 1974)), "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." Because Ifkovits and Moser fail to teach or suggest Appellants' claimed combination recited in independent claims 1 and 8, Appellants respectfully submit that a prima facie case of obviousness has not been established and that the rejection should be reversed.

Ifkovits teaches a sheet accumulating system "to increase the overlapped amount of cut sheets in a continuous web cutter and a right angle transport device so as to increase the collating efficiency of a sheet accumulator." Ifkovits at col. 1, lines 56-59. This is carried out by moving the sheets 41, 42 (see Fig. 2) with "different speeds." Id. at col. 4, lines 17-19. In particular, the "sheet 42 is moved at a first speed 112 and the sheet 44 is moved at a second speed 114, which is greater than the first speed 112." Id. at lines 19-21. The different speeds are achieved using "different mechanical advantages on the pulley systems 140, 160." Id. at lines 51-54 and Figs. 6a-6c.

Ifkovits fails to teach or suggest a "right angle turn transport transporting individual sheets at a first velocity, the first velocity being a function of the cutting rate multiplied by the width of the individual sheets," as recited in claim 1. Further, Ifkovits fails to teach or suggest "transporting the individual sheets at a first velocity. . . the first

velocity being a function of the cutting rate multiplied by the document width," as recited in claim 8.

Indeed, Ifkovits provides no teaching or suggestion of any sort of variable control of its mechanisms for moving sheets. See, for example, Ifkovits at col. 2, lines 3-9:

The web cutter comprises a first movement mechanism for moving the first sheet toward the right angle transport device with a first moving speed, and a second movement mechanism for moving the second sheet toward the right angle transport device with a second moving speed greater than the first moving speed for increasing the overlapped amount.

Thus, the "movement mechanisms" of Ifkovits each operate at a constant speed, not at a "velocity being a function of the cutting rate multiplied by the width of the individual sheets," as recited in claim 1, or at a "velocity being a function of the cutting rate multiplied by the document width," as recited in claim 8.

The above-identified deficiencies of the Ifkovits reference were at least partially acknowledged in the final Office Action at page 4, where it was stated that the "width of the work pieces in Ifkovits et al. is too wide to meet the formula at issue."

Moser teaches a "turnover-sequencer staging apparatus" in which "seriatim-imbricated sheets are selectively de-imbricated" by several methods, including "speeding up of the leading sheet." Moser at Abstract.

However, Moser fails to overcome the deficiencies of Ifkovits discussed above.

Because the combined teachings of Ifkovits and Moser fail to teach or suggest Appellants' claimed combination recited in independent claims 1 and 8, as required by M.P.E.P. § 2143, Appellants respectfully submit that a prima facie case of obviousness has not been established and that the rejection should be reversed.

B. There is No Factual Support For the Rejection

According to M.P.E.P. § 2142, “[t]he legal concept of prima facie obviousness. . . allocates who has the burden of going forward with production of evidence in each step of the examination process.” Moreover, the “examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness.” Id. Because the Examiner has not met the initial burden of factually supporting the conclusion of obviousness made in the final Office Action, Appellants respectfully submit that the rejection should be reversed.

In the final Office Action at page 2, it was asserted that Ifkovits discloses a “first velocity capable of being a function of the cutting rate multiplied by the width of the individual sheets.” (Emphasis added.)

First, the above assertion finds no support in the Ifkovits reference itself or in the knowledge of one of ordinary skill in the art. In fact, the only support for the assertion is that provided by the Examiner. For example, regarding claim 1, it was asserted at page 4 of the Office Action that:

the combination of Ifkovits et al. in view of Moser et al. has a first velocity and it is capable of performing its intended use on a work piece that has a width that corresponds to the first velocity being a function of the cutting rate multiplied by the width of the individual sheets. (Emphasis added.)

It was further asserted at page 4 that the “apparatus disclosed by Ifkovits et al. is perfectly capable of performing its intended use on a work piece that has the width that meets the formula.” (Emphasis added.)

Appellants respectfully submit that the “intended use” of the device of Ifkovits is irrelevant to the analysis regarding that reference’s teaching or suggestion of the

subject matter of claims 1 and 8. Moreover, no factually supported teaching or suggestion of the claimed subject matter was identified in support of the rejection.

Further, regarding claim 8, it was asserted at page 4 that the “first velocity would have to be dependent on the cutting rate because if the first velocity were too fast or too slow the cut would not be perpendicular to the feed direction.” Appellants respectfully disagree and point out that Ifkovits teaches a “guillotine cutting module” (see Ifkovits at col. 1, line 20), through which the web proceeds in a stop and start motion guided by “tractor pins 12” (see col. 3, lines 52-54), as is known in the art. Thus, contrary to the Examiner’s assertion, the velocity of the transported web of Ifkovits is irrelevant to the orientation of the cut of the web.

Finally, an unsupported assertion, such as that provided in the Office Action, that a reference is “capable of” a teaching does not meet the requirements of a prima facie case of obviousness, namely, that “all the claim limitations must be taught or suggested by the prior art.” M.P.E.P. § 2143.03. In the present case, no teaching or suggestion of the claimed subject matter has been identified in the prior art. Accordingly, Appellants respectfully submit that the rejection should be reversed.

C. Conclusion

For the reasons set forth above, Appellants respectfully submit that claims 1 and 8 are patentable over the references applied in the final Office Action. Claims 2-7 and 9-12 depend directly or indirectly from claims 1 and 8 and therefore should be allowable for at least the same reasons the claims from which they depend are allowable. Accordingly, Appellants respectfully request reversal of the claim rejections and allowance of the pending claims.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this Appeal Brief, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 16-1885.

Respectfully submitted,

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**VIII. Claims Appendix**

1. An inserter input system comprising:

a web feeder providing a web of printed material, the web feeder feeding the web in a first direction;

a web slitting device splitting the web along the first direction into at least two portions;

a transverse web cutter cutting the portions of split web transverse to the first direction while the web is transported through the web cutter to form side-by-side individual sheets, the individual sheets having a width in the transverse direction and a length in the first direction, the web cutter cutting sheets at a cutting rate;

a right angle turn mechanism downstream of the web cutter whereby the individual sheets are rearranged to be one on top of the other in a shingled arrangement, the right angle turn mechanism comprising a portion of a right angle turn transport transporting individual sheets at a first velocity, the first velocity being a function of the cutting rate multiplied by the width of the individual sheets; and

a high speed separation transport downstream of the right angle turn transport and pulling individual shingled sheets out from the shingled arrangement and whereby sheets are thereafter transported serially and separated by a predetermined gap.

2. The inserter input system of claim 1 wherein the high speed separation transport has a second velocity that is a function of the cutting rate multiplied by a sum of the length of the individual documents and the predetermined gap.

3. The inserter input system of claim 2 further comprising:

one or more sensors for scanning a code on a document processed by the inserter input system, the code indicating a number of sheets for a collation to which the document belongs, the one or more sensors further providing a position indication of the document in the inserter input system; and

a controller coupled to the one or more sensors, the controller adjusting the cutting rate as a function of the number of sheets in the collation arriving at the high speed separation transport, whereby a lower number of sheets in the collation corresponds to decreasing the cutting rate, and a greater number of sheets in the collation corresponds to increasing the cutting rate.

4. The inserter system of claim 2 wherein the right angle turn mechanism comprises parallel forty five degree turning bars further comprising a first turning bar forming an inner paper path having a first turning path length, and a second turning bar forming an outer paper path having second turning path length, the second turning path length being longer than the first turning path length.

5. The inserter system of claim 4 wherein the first and second turning bars are spaced apart as a function of the individual sheet length such that the shingling arrangement comprises the sheets transported on the inner paper path being positioned at the bottom of the shingling arrangement and sheets transported on the outer paper path being positioned on the top of the shingling arrangement.



6. The inserter system of claim 2 wherein the right angle turn transport is controlled to decelerate to a stop and hold sheets upon an occurrence of a downstream stopping condition.

7. The inserter system of claim 2 wherein the transverse web cutter is a rotary cutter.

8. A method for generating sheets from a continuous web for creating mail pieces, the method comprising:

feeding the continuous web in a first direction;

splitting the continuous web along the first direction into at least two portions, the at least two portions each having a document width;

cutting the portions of split web transverse to the first direction at a cutting rate to form side-by-side individual sheets, the individual sheets each having a document length;

transporting the individual sheets at a first velocity and turning the side-by-side sheets at a right angle whereby the individual sheets are rearranged to be one on top of the other in a shingled arrangement, the first velocity being a function of the cutting rate multiplied by the document width; and

pulling individual shingled sheets out from the shingled arrangement at a second velocity whereby sheets are thereafter transported serially and separated by a predetermined gap.

9. The method of claim 8 wherein the second velocity is a function of the cutting rate multiplied by a sum of the document length and the predetermined gap.

10. The method of claim 9, further comprising:  
scanning a code on a document, the code indicating a number of sheets for a collation to which the document belongs;  
sensing a position of the scanned document and providing a position indication of the document; and  
adjusting the cutting rate as a function of the number of sheets in the collation prior to the step of pulling individual sheets out of the shingled arrangement, whereby a lower number of sheets in the collation corresponds to decreasing the cutting rate, and a greater number of sheets in the collation corresponds to increasing the first velocity.

11. The method of claim 9 wherein the step of transverse cutting is carried out using a rotary cutter device.

12. The method of claim 8 wherein the continuous web is comprised of printed material.

**IX. Evidence Appendix**

None.

**X. Related Proceedings Appendix**

None.